



PRIMARY PROJECT HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 8, NAD83, (2011)(2010.00), IN US SURVEY FEET BASED ON A FULLY CONSTRAINED STATIC GPS NETWORK HOLDING THE PUBLISHED NAD83

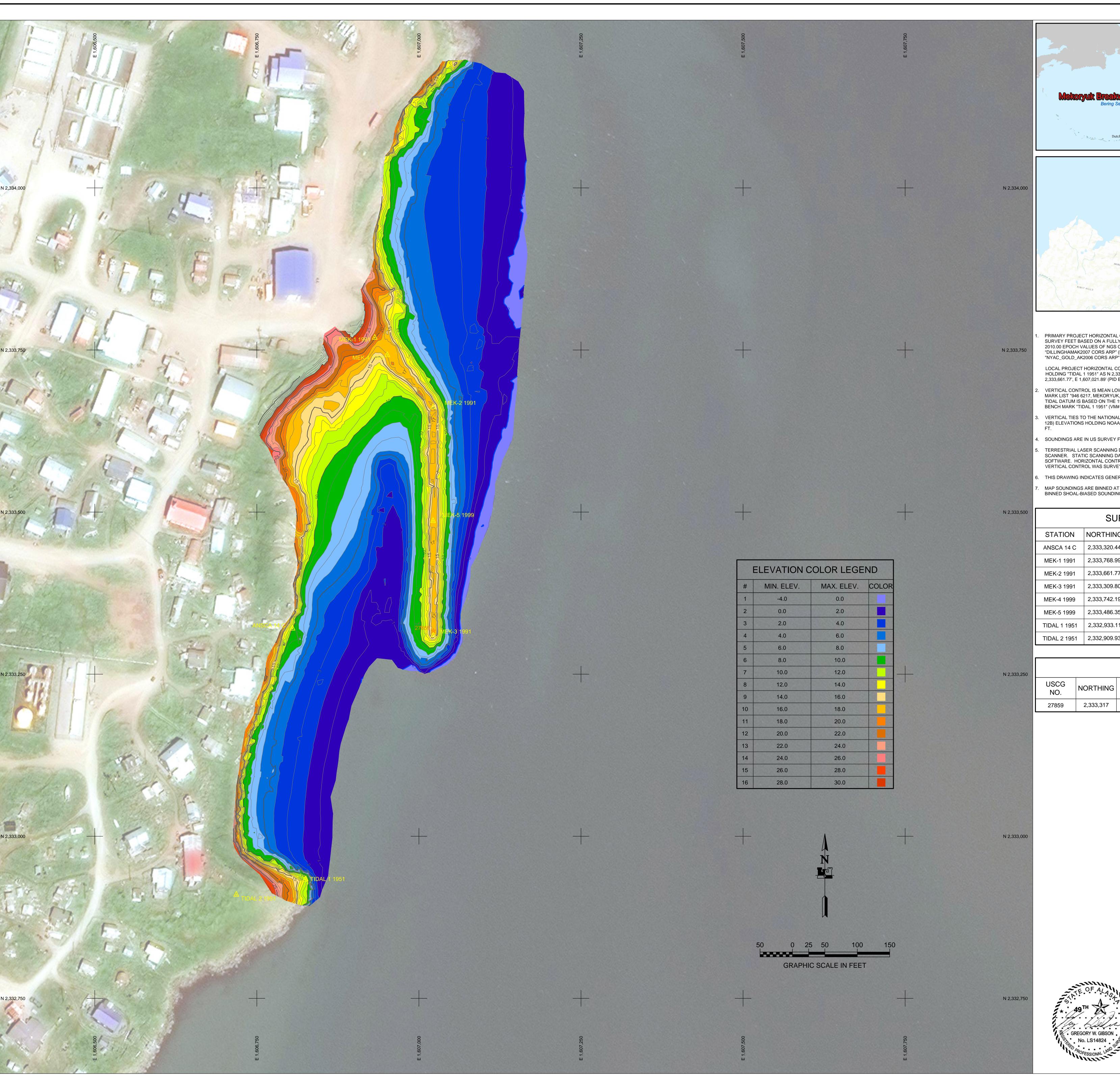
- VERTICAL CONTROL IS MEAN LOWER LOW WATER (MLLW=0.0 FT), BASED ON THE NOAA/NOS TIDAL BENCH MARK LIST "946 6217, MEKORYUK, MEKORYUK RIVER ENTRANCE, ALASKA", PUBLISHED 01/14/2011. THIS TIDAL DATUM IS BASED ON THE 1983-2001 TIDAL EPOCH AND IS REFERENCED BY HOLDING NOAA/NOS TIDAL BENCH MARK "TIDAL 1 1951" (VM# 19702/PID BBFZ51) AS 11.97 FT.
- VERTICAL CONTROL WAS SURVEYED USING DIFFERENTIAL LEVELING EQUIPMENT AND TECHNIQUES.

SURVEY CONTROL DATA				
STATION	NORTHING	EASTING	MLLW	DESCRIPTION
ANSCA 14 C	2,333,320.44	1,606,804.97	10.08	ANCSA SBC
MEK-1 1991	2,333,768.99	1,606,931.89	16.78	3 1/2 INCH ALUMINUM CAP
MEK-2 1991	2,333,661.77	1,607,021.89	17.69	3 1/2 INCH ALUMINUM CAP
MEK-3 1991	2,333,309.80	1,607,022.16	16.20	5/8 INCH REBAR
MEK-4 1999	2,333,742.19	1,606,951.18	17.22	DOMED BC
MEK-5 1999	2,333,486.35	1,607,021.70	17.25	DOMED BC
TIDAL 1 1951	2,332,933.11	1,606,824.82	11.97	USC&GS SBC
TIDAL 2 1951	2,332,909.93	1,606,718.24	41.81	USC&GS SBC

	NAVIGATION AIDS			
USCG NO.	NORTHING	EASTING	DESCRIPTION	
27859	2,333,317	1,607,022	MEKORYUK BREAKWATER DAYBEACON 2	

US Army Corps of Engineers ⊗ ALASKA DISTRICT

SHEET IDENTIFICATION 1-MEK-92-06-01







NOTES

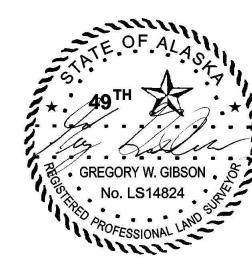
PRIMARY PROJECT HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 8, NAD83, (2011)(2010.00), IN US SURVEY FEET BASED ON A FULLY CONSTRAINED STATIC GPS NETWORK HOLDING THE PUBLISHED NAD83 2010.00 EPOCH VALUES OF NGS CORS STATIONS: "STPAULISLDAK2008 CORS ARP" (PID DO2396), "DILLINGHAMAK2007 CORS ARP" (PID DL6426), "BETHEL WAAS CORS ARP" (PID DK4091), AND "NYAC_GOLD_AK2006 CORS ARP" (PID DI2152).

LOCAL PROJECT HORIZONTAL CONTROL IS ALASKA STATE PLANE, ZONE 8, NAD83, IN US SURVEY FEET HOLDING "TIDAL 1 1951" AS N 2,332,933.11', E 1,606,824.82' (VM# 19702/PID BBFZ51) AND "MEK-2 1991" AS N 2,333,661.77', E 1,607,021.89' (PID BBFZ62).

- VERTICAL CONTROL IS MEAN LOWER LOW WATER (MLLW=0.0 FT), BASED ON THE NOAA/NOS TIDAL BENCH MARK LIST "946 6217, MEKORYUK, MEKORYUK RIVER ENTRANCE, ALASKA", PUBLISHED 01/14/2011. THIS TIDAL DATUM IS BASED ON THE 1983-2001 TIDAL EPOCH AND IS REFERENCED BY HOLDING NOAA/NOS TIDAL BENCH MARK "TIDAL 1 1951" (VM# 19702/PID BBFZ51) AS 11.97 FT.
- VERTICAL TIES TO THE NATIONAL SPATIAL REFERENCE SYSTEM ARE BASED ON PUBLISHED NAVD88 (GEOID 12B) ELEVATIONS HOLDING NOAA/USACE TIDAL BENCHMARK "TIDAL 1 1951" (VM# 19702/PID BBFZ51) AS 11.36
- 4. SOUNDINGS ARE IN US SURVEY FEET AND ARE MINUS UNLESS OTHERWISE INDICATED.
- TERRESTRIAL LASER SCANNING DATA COLLECTED JUNE 17-19, 2018 USING A REIGL VZ400 3D LASER SCANNER. STATIC SCANNING DATA WAS COLLECTED AND PROCESSED USING RIEGL RISCAN PRO 2.3 SOFTWARE. HORIZONTAL CONTROL WAS SURVEYED USING STATIC GNSS EQUIPMENT AND TECHNIQUES. VERTICAL CONTROL WAS SURVEYED USING DIFFERENTIAL LEVELING EQUIPMENT AND TECHNIQUES.
- THIS DRAWING INDICATES GENERAL CONDITIONS AT THE TIME OF THE SURVEY.
- MAP SOUNDINGS ARE BINNED AT 24 FEET AND ARE SHOAL-BIASED. CONTOURS ARE BASED ON 12 FEET BINNED SHOAL-BIASED SOUNDINGS.

SURVEY CONTROL DATA				
STATION	NORTHING	EASTING	MLLW	DESCRIPTION
ANSCA 14 C	2,333,320.44	1,606,804.97	10.08	ANCSA SBC
MEK-1 1991	2,333,768.99	1,606,931.89	16.78	3 1/2 INCH ALUMINUM CAP
MEK-2 1991	2,333,661.77	1,607,021.89	17.69	3 1/2 INCH ALUMINUM CAP
MEK-3 1991	2,333,309.80	1,607,022.16	16.20	5/8 INCH REBAR
MEK-4 1999	2,333,742.19	1,606,951.18	17.22	DOMED BC
MEK-5 1999	2,333,486.35	1,607,021.70	17.25	DOMED BC
TIDAL 1 1951	2,332,933.11	1,606,824.82	11.97	USC&GS SBC
TIDAL 2 1951	2,332,909.93	1,606,718.24	41.81	USC&GS SBC

	NAVIGATION AIDS			
	USCG NO.	NORTHING	EASTING	DESCRIPTION
ĕ	27859	2,333,317	1,607,022	MEKORYUK BREAKWATER DAYBEACON 2



THIS HYDROGRAPHIC SURVEY WAS COMPLETED UNDER THE OVERSIGHT OF AN NSPS/THSOA CERTIFIED HYDROGRAPHER

Gregory W. Gibson (317)

SHEET IDENTIFICATION 1-MEK-92-06-01